

### **REMARKS**

In response to the non-final Office Action of October 17, 2003, the Applicants respectfully request reconsideration in light of the following remarks.

Claims 1-5, 7, 8, 10-16, and 18-42 are pending in the present application. Claims 1-5, 7, 8, and 10-15 stand rejected. Claims 16, 18-32, and 38-42 have been indicated as allowed. The Applicants respectfully request reconsideration of the rejections for the following reasons.

Before providing remarks, however, the Applicants thank the Examiner for reconsideration of the final rejection issued September 18, 2003.

Claims 1-5, 7-8, and 10-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese unexamined Patent Publication 9-199302 in view of *Niihara et al.* (JP 6-69416) or *McGuire et al.* (U.S. Patent No. 6,023,403). The Applicants respectfully request reconsideration of this rejection for the following reasons.

With respect to independent claim 1, the Office Action asserts that the Japanese Publication 9-266105 (hereinafter JP '105) disclosed all of the elements of the claim except for a PTC thermistor element comprising a polymer. JP '105 however, does not teach or suggest first and second electrically insulative supporting substrates where "first and second PTC elements [are] separated from one another by one of the first and second substrates" as featured in claim 1. Rather, JP '105 teaches merely an insulating adhesive 16 on a side of either one of the thermistor elements 12 as shown in FIG. 6, for example. Thus, the PTC elements 12 are not separated by a substrate that is insulative and supporting, but merely separated by an insulating adhesive 16. Thus, JP '105 does not teach all of the claimed elements of claim 1.

Moreover, the Office Action recognizes that the PTC thermistor elements of JP '105 are not polymer elements. Nonetheless, the Office Action asserts that based on the teaching of *Niihara* or *McGuire*, it would have been obvious to substitute polymer devices for the centered ceramic PTC elements disclosed in JP '105. The Applicants respectfully disagree with this assertions, however, because substitution would vitiate the operation and advantages of the taught ceramic sintered PTC elements of JP '105. In particular, JP '105 specifically teaches that adjustment or reduction of resistance of the thermistor is achieved, in part, by thermistor resistance regulating electrodes 13 on the surface and interior of the thermistor element 12. (*See*, e.g., page 5, par. 0011 of the English Translation of JP '105). Further, claim 1 of JP '105 clearly calls for stacking and bonding of a plurality of thin plate material of ceramic sintered body in

order to form the thermistor element 12. Moreover, claim 2 specifically requires that the plurality of thin plate materials contain one or more types of metal oxide and where the compositional ratio of the metal oxides in the thin plate materials is different from each other. In order to maintain these characteristics which afford the advantage of adjustment or reduction of resistance in the thermistor, simple substitution of the taught thin plate materials with a polymer would not be obvious and, quite contrary, would render the disclosed PTC element unsuitable for achieving the advantages desired. Accordingly, the Applicants respectfully submit that claim 1 would not be obvious given the combination of the cited prior art.

In light of the foregoing comments, the Applicants submit that claim 1 is allowable over the prior art of record and request that the rejection be withdrawn accordingly.

With respect to dependent claims 2-5, 7, 8, and 10-15, these claims are believed to be allowable on their merits and also by virtue of their dependency on independent claim 1. Accordingly, these claims are believed to be allowable.

In light of the foregoing comments, the Applicants submit that the present application is in condition for allowance and requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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